AMENDMENT

Please amend the claims as follows:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

Claims 1-20 (canceled)

21. (currently amended): An oligonucleotide probe consisting of about [[15]] 30 to 50 contiguous nucleotides of a polynucleotide having a sequence as set forth in SEQ ID NO:23, or a sequence complementary thereto.

Claims 22-25 (canceled)

26. (currently amended): An oligonucleotide probe at least 30 nucleotides in length comprising a nucleic acid sequence which specifically hybridizes under stringent conditions to a nucleic acid comprising SEQ ID NO:23 or a sequence fully complementary thereto to form a detectable target probe duplex, wherein SEQ ID NO:23 encodes a polypeptide having esterase activity-and hybridization conditions comprise 45°C in 0.9 M NaCl, 50 mM NaH_2PO_4, pH 7.0, 5.0 mM Na_2EDTA, 0.5% SDS, 10X Denhardt's, and 0.5 mg/mL polyriboadenylic acid and a wash step comprising 30 minutes at room temperature in a buffer comprising 150 mM NaCl, 20 mM Tris hydrochloride, pH 7.8, 1 mM Na_2EDTA, 0.5% SDS, followed by a 30 minute wash in the buffer.

27. (currently amended): An oligonucleotide probe at least 30 nucleotides in length comprising a nucleic acid sequence which specifically hybridizes under stringent conditions to a nucleic acid having at least 95% identity to SEQ ID NO:23 over the entire length of SEQ ID NO:23, or a sequence fully complementary thereto to, form a detectable target probe duplex, wherein the nucleic acid having at least 95% identity to SEQ ID NO:23 encodes a polypeptide having esterase activity-and hybridization condition comprise 45°C in 0.9 M NaCl, 50 mM NaH_2PO_4, pH 7.0, 5.0 mM Na_2EDTA, 0.5% SDS, 10X Denhardt's, and 0.5 mg/mL polyriboadenylic and a wash step

comprising 30 minutes at room temperature in a buffer comprising 150 mM NaCl, 20 mM Tris hydrochloride, pH 7.8, 1 mM Na_2EDTA, 0.5% SDS, followed by a 30 minute wash in the buffer.

28. (previously presented): The oligonucleotide probe of claims 26 or 27, wherein the sequence is at least 50 bases.

29. (previously presented): The oligonucleotide probe of claims 26 or 27, wherein the sequence comprises SEQ ID NO:23 or a sequence complementary thereto.

Claim 30 (canceled)

31. (currently amended): An oligonucleotide probe consisting of about 30 to 50 [[20-50]] contiguous nucleotides of a polynucleotide having a sequence as set forth in SEQ ID NO:23, or a sequence complementary thereto.

32. (previously presented) A composition comprising an oligonucleotide probe consisting of the oligonucleotide probe of claims 21, 26, or 27, and a detectable label.

33. (previously presented) The oligonucleotide probe of claim 32, wherein the detectable label comprises an isotopic label or a non-isotopic label, which non-isotopic label is selected from the group consisting of: a fluorescent molecule, a chemiluminescent molecule, an enzyme, a cofactor, an enzyme substrate, and a hapten.

34. (currently amended) An oligonucleotide probe at least 30 nucleotides in length consisting of a sequence which specifically hybridizes under stringent conditions to a nucleic acid comprising SEQ ID NO:23 or a sequence fully complementary thereto, to form a detectable target probe duplex, wherein the nucleic acid encodes a polypeptide having esterase activity-and hybridization condition comprise 45°C in 0.9 M NaCl, 50 mM NaH_2PO_4, pH 7.0, 5.0 mM Na_2EDTA, 0.5% SDS, 10X Denhardt's, and 0.5 mg/mL polyriboadenylic acid and a wash step

comprising 30 minutes at room temperature in a buffer comprising 150 mM NaCl, 20 mM Tris hydrochloride, pH 7.8, 1 mM Na_2EDTA, 0.5% SDS, followed by a 30 minute wash in the buffer.

35. (currently amended) An oligonucleotide probe at least 30 nucleotides in length consisting of a sequence which specifically hybridizes under stringent conditions to a nucleic acid having at least 95% identity to SEQ ID NO:23 over the entire length of SEQ ID NO:23, and encoding a polypeptide having esterase activity or a sequence fully complementary thereto to form a detectable target probe duplex, wherein the nucleic acid having at least 95% identity to SEQ ID NO:23 encodes a polypeptide having esterase activity-and hybridization conditions comprise 45°C in 0.9 M NaCl, 50 mM NaH_2PO_4, pH 7.0, 5.0 mM Na_2EDTA, 0.5% SDS, 10X Denhardt's, and 0.5 mg/mL polyriboadenylic acid and a wash step comprising 30 minutes at room temperature in a buffer comprising 150 mM NaCl, 20 mM Tris hydrochloride, pH 7.8, 1 mM Na_2EDTA, 0.5% SDS, followed by a 30 minute wash in the buffer.

Claims 36 and 37 (canceled)

38. (previously presented) The oligonucleotide probe of claims 34 or 35, wherein the sequence is at least 50 bases.

39. (previously presented) The oligonucleotide probe of claims 34 or 35, wherein the oligonucleotide probe is 30 to 50 nucleotides in length.

40. (previously presented): A composition comprising an oligonucleotide probe consisting of the oligonucleotide probe of claims 34 or 35, and a detectable label.

41. (previously presented): The oligonucleotide probe of claim 40, wherein the detectable label comprises an isotopic label or a non-isotopic label.

42. (previously presented): The oligonucleotide probe of claim 41, wherein the non-isotopic label comprises a fluorescent molecule, a chemiluminescent molecule, an enzyme, a cofactor, an enzyme substrate or a hapten.

Claim 43 (canceled)

44. (currently amended) An oligonucleotide probe consisting of at least [[20]] 30 contiguous nucleotides of a polynucleotide having a sequence as set forth in SEQ ID NO:23, or a sequence complementary thereto.

45. (currently amended) An oligonucleotide probe consisting essentially of at least 30 contiguous nucleotides of a polynucleotide having a sequence as set forth in SEQ ID NO:23, or a sequence complementary thereto.

46. (previously presented) An oligonucleotide probe consisting of at least 50 contiguous nucleotides of a polynucleotide having a sequence as set forth in SEQ ID NO:23, or a sequence complementary thereto.

47. (previously presented): A composition comprising an oligonucleotide probe consisting of the oligonucleotide probe of claim 44, and a detectable label.

48. (currently amended) An oligonucleotide probe comprising a nucleic acid sequence which specifically hybridizes under stringent conditions to a nucleic acid having at least 90% sequence identity to SEQ ID NO:23 over the entire length of SEQ ID NO:23, or a sequence fully complementary thereto to, form a detectable target probe duplex, wherein the nucleic acid having at least 90% sequence identity to SEQ ID NO:23 has an esterase activity, wherein the hybridization conditions comprise a wash step comprising 30 minutes at room temperature in a buffer comprising 150 mM NaCl, 20 mM Tris hydrochloride, pH 7.8, 1 mM Na_2EDTA, 0.5% SDS, followed by a 30 minute wash in the buffer.

49. (previously presented) The oligonucleotide probe of claim 48, wherein the nucleic acid has 95% sequence identity to SEQ ID NO:23.

50. (previously presented) The oligonucleotide probe of claim 48, wherein the oligonucleotide probe further comprises a detectable label.

51. (withdrawn) A method for amplifying a nucleic acid comprising using an oligonucleotide probe as set forth in claim 26, claim 27 or claim 44 as an amplification primer.

52. (previously presented) An amplification primer comprising an oligonucleotide as set forth in claim 26, claim 27 or claim 44.

53. (previously presented) A diagnostic probe comprising an oligonucleotide as set forth in claim 26, claim 27 or claim 44.

54. (new) An oligonucleotide probe comprising a nucleic acid sequence which specifically hybridizes under stringent conditions to a nucleic acid having at least 90% sequence identity to SEQ ID NO:23 over the entire length of SEQ ID NO:23, or a sequence fully complementary thereto to, form a detectable target probe duplex, wherein the oligonucleotide probe specifically hybridizes under stringent conditions to a nucleic acid encoding a polypeptide having esterase activity, and the nucleic acid having at least 90% sequence identity to SEQ ID NO:23 has an esterase activity, and the hybridization conditions comprise a wash step comprising 30 minutes at room temperature in a buffer comprising 150 mM NaCl, 20 mM Tris hydrochloride, pH 7.8, 1 mM Na_2EDTA, 0.5% SDS, followed by a 30 minute wash in the buffer.

55. (new) The oligonucleotide probe of claim 54, wherein the sequence identity to SEQ ID NO:23 is at least 95%.

56. (new) The oligonucleotide probe of claim 55, wherein the nucleic acid sequence specifically hybridizes under stringent conditions to a nucleic acid having a sequence as set forth in SEQ ID NO:23.